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EXAMINER	
SALTARELLI, DOMINIC D	
ART UNIT	**PAPER NUMBER**
2611	

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/600,447	FILISAN, ANDREA POLO	
	Examiner	Art Unit	
	Dominic D. Saltarelli	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 February 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 40 is objected to because of the following informalities: On line 2, "claim 40" should read --claim 39--. Appropriate correction is required.

Response to Arguments

2. The international stage claims submitted were not originally considered due to misnumbered amended sheets. However, review indicated the amended sheets are in proper condition for examination, and are considered in the immediate office action.

3. Further, applicant argues against usage of the Nicholson reference against the pending claims, citing that the immediate invention is different from Nicholson in that the invention mixes reserved and non-reserved signals for distribution (page 17, 1st and 2nd paragraphs and page 18, 3rd paragraph).

4. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., mixing reserved signals with non-reserved signals) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 3, 5, 7-9, 12-24, 31-36, and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nicholson (4,901,367, of record) in view of Sie et al. (5,534,941) [Sie].

Regarding claims 1 and 50, Nicholson discloses a system (fig. 1) for the distribution to a community environment (col. 1, lines 19-40) of a plurality of information signals entering said environment and being transmitted (from the different program sources 40, col. 4, lines 30-42) according to different standards (as shown in fig. 5, because different transmission types, local broadcasts and satellite, operate according to respective standards, and the standard used to transmit satellite broadcasts is not the same as the one used for transmitting local broadcasts), comprising means for receiving the signals (fig. 5, program sources include local broadcasts, satellite programming, and pay-per-view programming, thus the receiving means include a cable and/or antenna receiver in addition to a satellite receiver), means for the amplification (fig. 2, amplifier) and the standard frequency conversion of said signals (RSPC 2 in fig. 3, which demodulate then remodulate signals from broadcast source onto personal channels, col. 4, lines 30-42), means for mixing (fig. 2, combiner 21) said information signals on a distribution network (fig. 2, distribution cable 3) to a plurality of signal sockets (fig. 3, output of filter 23 which leads to TV 25), said signals being reserved to predetermined signal sockets among said plurality (col.

1, lines 18-24, col. 2, lines 51-60, and col. 5, lines 2-25), wherein, for each of said predetermined signal socket, the system provides further means for frequency converting the received reserved signals in reserved frequency portions [personal channels] of the band (col. 4 line 67 – col. 5 line 13), said personal channels being reserved to the corresponding predetermined signal sockets (users) and forbidden to the remaining sockets through means for allowing access to said personal channels of the band only to the corresponding signal sockets (fig. 3, filter 23), said means for frequency converting the received signals in personal channels of the band being commanded through respective user control means (col. 5, lines 14-25).

Nicholson fails to disclose the signals are digital.

In an analogous art, Sie teaches utilizing digital compression to transmit video signals (col. 7, lines 20-52), wherein digital compression provides higher performance and greater flexibility than analog systems.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson to receive and distribute digital information signals, as taught by Sie, for the benefit of higher performance and greater flexibility in distributing video information data.

Regarding claim 3, Nicholson and Sie disclose the system of claim 1, wherein the distribution network is composed of coaxial cable (Nicholson, fig. 2, feeder cable 3, col. 4 lines 30-36).

Regarding claims 5, 7, and 8, Nicholson and Sie disclose the system of claim 1, but fail to disclose the personal channel is 8 MHz wide and the personal channel is contained in a frequency band between 230-445 MHz.

The assignment of bandwidth for a personal channel bandwidth and the frequencies at which the personal channel is resident are at the discretion of the designer but limited by the transmission medium, FCC regulations, and the amount of data to transmit from one point to another.

It would have been obvious at the time to a person of ordinary skill in the art to limit the personal channel to 8 MHz wide, as this would allow more personal channels to be carried over the distribution network (as Nicholson originally teaches using 12 MHz wide channels, as the bandwidth filter 23 used for isolating a personal channel is a 12 MHz bandwidth filter), and placing said personal channel in the 230-445 MHz range is beneficial for the lower attenuation experienced by signals placed in said range as opposed to placing them in higher frequency ranges.

Regarding claim 9, Nicholson and Sie disclose the system of claim 1, wherein the means for allowing access to said personal channels comprises means for filtering the personal channel located upstream of the signal socket (Nicholson, fig. 3 and fig. 4, filter 23, col. 26-37, wherein the output of the filter is the signal socket).

Regarding claim 12, Nicholson and Sie disclose the system of claim 1, wherein selection of the digital signal to be converted in said predetermined channel is performed by a return channel (Nicholson, "user's assigned transmit channel", col. 5, lines 14-25).

Regarding claims 13-17, Nicholson and Sie disclose the system of claim 12, but fail to disclose the return channel is FSK, PSK, QPSK, or QAM modulated, or bi-directional under TDMA procedure.

The official notice taken that FSK, PSK, QPSK, and QAM modulation, and TDMA multiplexing are all notoriously well known in the art as methods for transmission of digital data, each having particular benefits associated with each, was not traversed by the applicant, and is thus taken as an admission of the facts presented.

Therefore, it would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson to modulate the return channel using FSK, PSK, QPSK, or QAM procedures or bi-directional under TDMA procedure, as each has particular advantages associated with each, such as the robustness (resistance to noise) of QPSK modulation, or the transmission efficiency (high bit rate) of QAM, or the bandwidth conservation of TDMA (which allows multiple digital channels to be multiplexed onto a single physical channel).

Regarding claim 18, Nicholson and Sie disclose the system of claim 12, but fail to disclose the return channel has a bandwidth of 128 KHz.

The official notice taken that it is notoriously well known in the art to designate return channel bandwidth as 128 kHz bands, as this is a part of the DVB-RC (digital video broadcasting-return channel) standard was not traversed by the applicant and is thus taken as an admission of the fact presented.

Therefore, it would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson and Hamlin to limit the return channel bandwidth to 128 KHz so as to conform to the DVC-RC standard, an established and agreed upon standard for transmitting digital video, assuring hardware compliance among devices in a system, thus alleviating the need for specialized, custom equipment.

Regarding claim 19, Nicholson and Sie disclose the system of claim 12, but fail to disclose the return channel is between 41 and 46.5 MHz.

The official notice taken that it is notoriously well known to place return channels in the 5-50 MHz range, as frequencies beyond this range are utilized for higher bandwidth, downstream communications, was not traversed by the applicant, and is thus taken as and admission of the fact presented.

Therefore, it would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson and Hamlin to place

the return channel between 41 and 46.5MHz, as it is conventional to place return channels in cable distribution networks in the 5-50 MHz range.

Regarding claim 20, Nicholson and Sie disclose the system of claim 12, wherein the return channel uses the same coaxial cable of the distribution network of the system (Nicholson, col. 5, lines 14-25).

Regarding claim 21, Nicholson and Sie disclose the system of claim 12, wherein the return channel used by a user is not accessible to all other users of the system (Nicholson teaches return channels are assigned to particular users for exclusive use, col. 5, lines 20-23 and col. 1, lines 22-24).

Regarding claim 22, Nicholson and Sie disclose the system of claim 12, wherein the return channel is radio frequency irradiated (Nicholson teaches upstream information is radio frequency modulated signals transmitted over the user allocated transmit channel, col. 5, lines 51-55).

Regarding claim 23, Nicholson and Sie disclose the system of claim 1, wherein the means for frequency conversion in a predetermined channel of the digital signal are obtained by means of a transmodulator (Nicholson, RSPC 3 in fig. 3, col. 4 line 59 – col. 5 line 13).

Regarding claim 24, Nicholson and Sie disclose the system of claim 1, wherein Nicholson discloses a user terminal (fig. 4, office terminal 4) and an IRD receiver-decoder (fig. 4, TV receiver 25) are provided, which can be operated by a same remote control (fig. 4, remote control unit 33, controls all communications, both video which is received by receiver 25 and data which is receiver by modem 26 in the office terminal 4, col. 5 lines 14-25 and col. 6 lines 19-36).

Regarding claim 31, Nicholson and Sie disclose the system of claim 1, wherein said user control means (Nicholson, fig. 2, remote control 33) are apt to generate digital upstream signals and convert them in frequency into the personal channel (Nicholson, col. 5, lines 51-55), and that second selection and handling means (Nicholson, transmit switch 14 in fig. 6) are provided for said digital signals in transmission (Nicholson teaches the selection means is used for communication of internal signals with outside sources, col. 6, lines 3-10), and means (Nicholson, col. 6, lines 3-10, CATV, SMATV, microwave or fiber optic link) for the transmission of said upstream signals from satellite or by cable.

Regarding claim 32, Nicholson and Sie disclose the system of claim 31, wherein the transmodulator means and the second selection means both operate on downstream and upstream signals under SCPC procedure (wherein SCPC stands for single channel per carrier, and Nicholson teaches all upstream and

downstream communications take place on user allocated channels, col. 5, lines 4-25, wherein the individual channels are specific to particular frequency bands).

Regarding claim 33, Nicholson and Sie disclose the system of claim 31, wherein said personal channel utilizes the FDMA procedure (Nicholson teaches the users personal channel is a 12 MHz band spit into a downstream band and an upstream band, thus upstream and downstream signals are simultaneously present in said personal channel, col. 1, lines 22-27).

Regarding claim 34, Nicholson and Sie disclose the system of claim 33, wherein the upstream and downstream signals occupy non-overlapping frequency bands (Nicholson teaches upstream and downstream communication occur on simultaneously on two distinct TV channels, col. 1, lines 22-24).

Regarding claim 35, Nicholson and Sie disclose the system of claim 31, but fail to disclose the personal channel is used under time division multiple access (TDMA) procedure.

The official notice taken that it is notoriously well known in to art to define channels using TDMA, as TDMA conserves bandwidth, was not traversed by the applicant, and is thus taken as an admission of the facts presented.

Therefore, it would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson and Sie to use the

personal channel un TDMA procedure, as TDMA is an effective means to increase the number of channels available on a given bandwidth, more efficiently utilizing said bandwidth.

Regarding claim 36, Nicholson and Sie disclose the system of claim 32, but fail to disclose the selection means and selection and handling means are contained in the same container.

The official notice taken that placement of physical devices in the same physical container is a convenient placement of hardware, as it is compact, and thus conserves space, was not traversed by the applicant, and is thus taken as an admission of the facts presented.

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Nicholson and Sie to place the first and second selection means in the same container for convenience and space conservation.

Regarding claim 51, Nicholson and Sie disclose the method of claim 50, further comprising the step of operating a frequency selection in the frequency portion of each personal channel between the distribution network and a receiver associated to the respective personal channel (Nicholson teaches dynamically selecting a programming source for modulating onto the personal channel, col. 4, lines 30-42, and selection a particular channel from a satellite or cable broadcast would be the aforementioned frequency selection).

Regarding claim 52, Nicholson and Sie disclose the method of claim 51, comprising the step of frequency filtering the frequency portions associated to the personal channels between the distribution network and a receiver (Nicholson, fig. 3, filter 23 filters the frequency portion corresponding to a personal channel).

7. Claims 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nicholson and Sie as applied to claim 1 above, and further in view of Hamlin (5,574,964, of record).

Regarding claim 25, Nicholson and Sie disclose the system of claim 1, but fail to disclose two or more means for frequency converting one or more of the received digital signals in personal channels are contained in a sole transmodulator device.

In an analogous art, Hamlin teaches placing the components for receiving and remodulating signals of different transmission formats into a sole transmodulator device (fig. 2 contains the demodulation and remodulation devices all within converter 34, col. 3, lines 24-54), for an economic means to transmodulate multiple received signals in a modular fashion (only the demodulation portions need to be added when upgrading the system, col. 3, lines 47-54).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson and Sie to place the plural

selection means within a single transmodulator device, as taught by Hamlin, for the benefit of maintaining the modularity of the system in an economic fashion (only the receiving and demodulation portions need to be added to expand the system, output hardware is shared and does not need to be duplicated when expanding the system).

Regarding claims 26 and 27, Nicholson, Sie, and Hamlin disclose the system of claim 25, wherein the sole transmodulator device comprises plural tuner means apt to perform the selection of digital signals within at least two frequency ranges (Nicholson, fig. 3, tuner 16, wherein there is one tuner per customer as there is one RSPC per customer, col. 4, lines 30-42), and plural demodulation means apt to demodulate at least two of said digital signals (Nicholson, fig. 3, demodulator 17, wherein there is one demodulator per customer as there is one RSPC per customer, col. 4, lines 30-42) transmitted with different standards (Hamlin, col. 3, lines 3-12).

Regarding claim 28, Nicholson, Sie, and Hamlin disclose the system of claim 26, wherein said transmodulator device includes a commutator (Hamlin, fig. 2, input to remodulator 104) apt for receiving the digital signals coming from the demodulators.

Regarding claims 29 and 30, Nicholson, Sie, and Hamlin disclose the system of claim 28, wherein the transmodulator comprises a modulator (Hamlin, fig. 2, remodulator 104) for remodulating the output of the communator and a converter (also part of remodulator 104, prior to output from output interface 59, Hamlin, fig. 2) for converting in frequency the final output into a predetermined channel (Hamlin, col. 3, lines 24-54).

8. Claims 2, 6, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nicholson as applied to claim 1 above, and further in view of Yoshida (4,823,361, of record).

Regarding claims 2, 6, and 53, Nicholson and Sie disclose the system and method of claims 1 and 51, but fail to disclose the digital signal being present in said personal channels are Quadrature Amplitude Modulation (QAM) signals.

In an analogous art, Yoshida teaches QAM is widely used in radio frequency transmissions for its high transmission efficiency (col. 1, lines 10-15).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson and Sie to modulate the information signals using QAM, as taught by Yoshida, for the benefit of the high transmission efficiency of information signals achieved using QAM.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nicholson and Sie as applied to claim 1 above, and further in view of Macdonald et al. (5,835,128, of record) [Macdonald].

Regarding claim 4, Nicholson and Sie disclose the system of claim 1, but fail to disclose the distribution network comprises MMDS or LMDS networks.

In an analogous art, Macdonald teaches a video distribution system wherein video signals are redistributed via wireless MMDS or LMDS networks (col. 4, lines 5-18), wherein wireless video distribution is free from geographic limitations and do not require any special medium for transmission of signals.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson and Sie to utilize MMDS or LMDS networks for the distribution of information signals, as taught by Macdonald, for the benefit of free distribution of signals without regard to geographic limitations and without relying on costly cables or wiring which is subject to wear and breakage.

10. Claims 10, 11, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nicholson and Sie as applied to claim 1 above, and further in view of Dufresne et al. (4,982,440, of record) [Dufresne].

Regarding claims 10, 11, and 49, Nicholson and Sie disclose the system of claim 1, wherein the system includes filtering means (fig. 3, bandwidth filter 23) and personal channels (col. 5, lines 4-6), but fail to disclose the filtering means

includes a band stop filter to apt to eliminate reception of personal channels by a receiver in parallel with a channel pass filter apt to let a personal channel through to a single user, said means apt to prevent the passage of signals generated inside a further distribution network associated to a signal socket.

In an analogous art, Dufresne teaches a video distribution system (fig. 3) wherein particular downstream information is routed through a first filter in the downstream direction (fig. 4, filter 13, col. 7, lines 40-50) and is connected in parallel with a second filter (fig. 4, filter 16) for preventing undesired upstream noise (col. 7 line 60 – col. 8 line 12).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson and Sie to include in the filtering means parallel filters, one for band pass functionality and the other for band rejection functionality, as taught by Dufresne, wherein the first filter is apt to let a personal channel through to a single user, as it's function is to allow downstream signals to pass through while blocking upstream signals, and the second filter is apt to eliminate the reception of personal channels as it blocks all downstream signals in addition to blocking upstream noise. The benefit of this arrangement is to selectively allow for the reception of a particular user channel in the downstream direction while also blocking any upstream noise, wherein upstream noise by nature would include locally generated signals generated inside a further distribution network that do not belong on the upstream path, such as a home LAN.

11. Claims 37-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nicholson and Sie as applied to claim 1 above, and further in view of Saward (5,537,473, of record) and Diehl et al. (5,835,864, of record) [Diehl].

Regarding claim 37, Nicholson and Sie disclose the system of claim 1, but fails to disclose the user control means (office terminal 4 in fig. 4 is under control of remote control 33) comprise a receiver apt to perform an access function to a plurality of conditioned access services by reading the information contained in a smart card, and that said information contained in said smart card controls the means for frequency converting the received reserved digital signals in the personal channel.

In an analogous art, Saward discloses utilizing a smart card to control a receiver in allowing said receiver to receive conditional services by reading information stored in said smart card (col. 3, lines 1-30), providing a highly secure means by which customers may receive conditional access programming.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson and Sie to include accessing a plurality of conditional access services by reading information contained in a smart card, as taught by Saward, for the benefit of providing a highly secure means by which customers may receive conditional access programming, as smart cards are unique to individual users and highly resistant to tampering.

Nicholson, Sie, and Saward fail to disclose said information contained in said smart card further controls the means for frequency converting received reserved digital signals in the personal channel.

In an analogous art, Diehl teaches using information stored on a smart card (in EEPROM memory, col. 3, lines 3-6) to program frequency conversion means (col. 2 line 49 – col. 3 line 11), for the benefit of easily and dynamically programming receiver equipment according to the desired configuration of the users (col. 1, lines 50-62).

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Nicholson, Sie, and Saward to include controlling the means for frequency converting received signals using information in said smart card, as taught by Diehl, for the benefit of easily and dynamically programming receiver equipment according to the desired configuration of the users, allowing the economic use of common receiver equipment at a plurality of sites.

Regarding claims 38-42, Nicholson, Sie, Saward, and Diehl disclose the system of claim 37, wherein said information contained in said smart card comprises information for tuning the transmodulator means and transponder preselection means (Diehl teaches the information includes channel map information for proper tuning, col. 2 line 66 – col. 3 line 11, which would include

information for proper tuning when the service is satellite television, one of the signal sources as disclosed by Nicholson, as shown in fig. 2).

Regarding claim 43, Diehl additionally discloses the information stored on the smart card is for the purpose of dynamically programming common receiver equipment so that it may properly tune to designated channels depending on how the equipment is implemented (col. 2 line 49 – col. 3 line 11), and such a teaching also applies to programming a receiver with the personal channel of a particular user (Nicholson, user allocated frequencies, col. 1, lines 22-24, col. 4, lines 30-36, and col. 5, lines 20-23).

It would have been obvious at the time to a person of ordinary skill in the art to further modify the system disclosed by Nicholson, Sie, Saward, and Diehl to include in said information stored on said smart card, frequency information so said personal channel, as taught by Diehl, for the benefit of easily and dynamically programming receiver equipment according to the desired configuration of the users, allowing the economic use of common receiver equipment at a plurality of sites.

Regarding claim 44, Nicholson, Sie, Saward, and Diehl disclose the system of claim 37, wherein the selection means and the smart card contain respective electronic keys, whose congruence enable the operation of said distribution system of a plurality of signals to a community environment (Saward

teaches the smart card includes decryption keys, which are provided to reception equipment for decrypting signals to enable reception, col. 3, lines 20-27).

Regarding claim 45, Saward further discloses a device in a receiver (descrambler control circuit 22 in fig.3) which writes data in a program memory of a microprocessor contained in the smart card ("off-air" update to stored information, col. 3, lines 20-30), which enables broadcasters to dynamically maintain the information used by customers for accessing services.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclose by Nicholson, Sie, Saward, and Diehl to include a device in said control means for writing data in a program memory of a microprocessor contained in the smart card, as taught by Saward, for the benefit of enabling broadcasters to dynamically maintain the information used by customers for accessing services, such as for billing purposes and a convenient means by which customers may upgrade their service.

Regarding claim 46, Nicholson, Sie, Saward, and Diehl disclose the system of claim 48, wherein the program memory is and EEPROM type memory (Diehl, col. 3, lines 3-6).

Regarding claim 47, Nicholson, Sie, Saward, and Diehl disclose the system of claim 45, wherein the device for writing data in a program memory of a

microprocessor contained in the smart card operates on data sent to the control means by modem (Nicholson teaches data communications are carried out using modems, col. 5, lines 38-44).

Regarding claim 48, Nicholson, Sie, Saward, and Diehl disclose the system of claim 45, wherein the device for writing data in a program memory of a microprocessor contained in the smart card operates on data sent to the control means by means of the service information contained in the received digital signal (the information being written to the smart card is service information, as they are customer access rights, as taught by Saward, and channel map information, as taught by Diehl).

Conclusion

12. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dominic D. Saltarelli whose telephone number is (571) 272-7302. The examiner can normally be reached on Monday - Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dominic Saltarelli
Patent Examiner
Art Unit 2611

DS

HAITRAN
PRIMARY EXAMINER